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REMARKS

Claims 5, 10 and 30 are amended. The amendments are supported by the application as originally filed, for example, page 12 lines 1-8. Claim 26 is cancelled. Claims 14-24, 34, 36 and 38-40 are withdrawn from consideration as being directed to an invention that is independent and distinct from the invention originally claimed. Applicants reserve the right to present the withdrawn claims in a divisional or continuing application. Claims 1-3, 5-13, 25 and 27-33 are before the Examiner.

Claim 5 is objected to as being unclear. Claim 5 is amended to state that the concentration of the inorganic acid or its salts is based on the total weight of the electrolyte selected from the group consisting of carboxylic acids or their salts or inorganic acids or their salts. Support for the amendment is found beginning at page 11 line 32 to page 12 line 8. Applicants request that the objection be withdrawn.

Claim 26 is objected to for not further limiting the claim from which it depends. Claim 26 is cancelled.

Claims 10 and 30 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Claims 10 and 30 are amended to recite that the electrolyte is selected from the listed acids and their salts. Applicants request that the rejection be withdrawn.

As a preliminary matter, Applicants note that there seems to be some confusion as to the difference between an alkane, an alkene or an alkyne organic chemical compound or functional group. Alkanes have a hydrocarbon structure containing only carbon-carbon and carbon-hydrogen single bonds. Alkenes have a hydrocarbon structure containing one or more carbon-carbon double bonds. Alkynes have a hydrocarbon structure containing one or more carbon-carbon triple bonds. Carbon-carbon double or triple bonds are carbon-carbon π bonds. The pending claims recite "a compound having an unsaturated carbon-carbon or carbon-nitrogen π bond". The claimed unsaturated carbon-carbon π bond clearly refers to an alkene or alkyne structure. A page is enclosed from an on-line Organic Chemical Glossary that provides definitions of an alkane, an alkene and an alkyne. These definitions are consistent with

definitions found generally in organic chemistry texts and with the use made of these terms in the application.

Claims 1-3, 5-13 and 25-33 are rejected under 35 U.S.C. § 102(b) as anticipated by Tsubaki, et al. (US 6,307,732). Applicants traverse the rejection to the extent that it can be maintained. Claim 26 is cancelled.

The Response filed 9 June 2006 amended the claims to recite "a compound having an unsaturated carbon-carbon or carbon-nitrogen π bond". As explained in that Response, Applicants discovered means to reduce a pressure increase in a capacitor from hydrogen gas generated in high temperature environments. Hydrogen pressure is reduced by including in the capacitor a compound comprising an unsaturated carbon-carbon (alkene or alkyne) or carbon-nitrogen π bond containing chain that undergoes hydrogen addition reaction. The unsaturated compound efficiently absorbs hydrogen generated in the capacitor by a chemical reaction, thereby inhibiting deterioration of the capacitor.

The '732 patent discloses an electrolytic and an electrolytic solution used therein. The electrolyte and electrolytic solution comprise various saturated (alkane) organic compounds none of which comprise an unsaturated carbon-carbon (alkene) or carbon-nitrogen π bond containing chain capable of undergoing a hydrogen addition reaction. The '732 patent fails to disclose the unsaturated, hydrogen-absorbing compounds of the claimed invention. The Office Action of 19 July 2006, states that the Applicants' argument does not explain why the taught ammonium alkane dicarboxylates are not compounds having unsaturated carbon-carbon or carbon-nitrogen π bonds that undergo hydrogen addition reaction. As explained above, alkane compounds or functional groups contain hydrocarbon portions that comprise only carbon-carbon and carbon-hydrogen single bonds. Alkane dicarboxylates taught by Tsubaki, et al. are chemically incapable of undergoing a hydrogen addition reaction. Applicants respectfully submit that '732 does not anticipate the rejected claims and request that the rejection on this ground be withdrawn.

Claims 1-3, 5-13 and 25-33 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over US 6,285,543, US

6,349,028 and US 6,288,889 and claims 1-4, 6-16 and 21-30 of co-pending Application No. 10/490,651. Applicants traverse the rejection to the extent that it can be maintained.


Applicants respectfully submit that the claimed invention is not obvious over the cited patents or patent application. The '543, '028 and '889 patents claim fail to recite compounds having carbon-nitrogen π bonds. Some claims of the cited patents recite compounds having oxygen-nitrogen π bonds. These compounds have a different chemical structure that do not teach or suggest carbon-nitrogen π bonds. Applicants respectfully request that the provisional obviousness-type double patenting rejection be withdrawn. However, Applicants will submit a terminal disclaimer if appropriate once allowable subject matter is indicated.

In view of the above amendments and remarks, Applicants respectfully request a Notice of Allowance. If the Examiner believes a telephone conference would advance the prosecution of this application, the Examiner is invited to telephone the undersigned at the below-listed telephone number.

Respectfully submitted,

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10/19/06
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All

achiral: A molecule that's superimposable on its mirror image. Achiral molecules do not rotate plane-polarized light.

acid: A proton donor or an electron pair acceptor.

alcohol: A molecule containing a hydroxyl (OH) group. Also a functional group.

aldehyde: A molecule containing a terminal carbonyl (CHO) group. Also a functional group.

alkane: A molecule containing only C-H and C-C single bonds.

alkene: A molecule containing one or more carbon-carbon double bonds. Also a functional group.

alkyne: A molecule containing one or more carbon-carbon triple bonds. Also a functional group.

allylic carbon: An sp^3 carbon adjacent to a double bond.

amide: A molecule containing a carbonyl group attached to a nitrogen ($-CONR_2$). Also a functional group.

amine: A molecule containing an isolated nitrogen = (NR_3). Also a functional group.

anion: A negatively charged atom or molecule.

anti addition: A reaction in which the two groups of a reagent X-Y add on opposite faces of a carbon-carbon bond.

anti conformation: A type of staggered conformation in which the two big groups are opposite of each other in a